

MODERN METHODS AND STANDARDS FOR DETERMINING MOISTURE CONTENT

<https://doi.org/10.5281/zenodo.17440476>

Ikromzhon Ismailov¹, Farkhod Kholmiraev¹, Khumoyin Khasanboev¹

*Associate Professor, Department of Metrology and Standardization, Namangan State
Technical University*

Abstract

This article is devoted to improving standard methods for analyzing test results when assessing nonconformity in measuring the moisture content of nonwoven products, as well as their widespread implementation and support in our country. The aim of the article is to advance the development and production of high-quality and competitive products in our country.

Keywords

standard, product, product moisture content, compliance, technical committee, modern methods, textile products.

Introduction. The developer-organization and the agency that approved the standard are responsible for the content and technical and economic justification of the standard and for the compliance of indicators, norms and requirements with the modern level of science and technology.

In order to achieve organizational and methodological unity in the development of the standard, as well as to verify the implementation of the work stages, four stages of standard development have been established:

Stage 1 - development and approval of the technical terms of reference for the development of the standard (carried out if necessary);

Stage 2 - development of a draft standard (first draft) and distribution for feedback;

Stage 3 - consideration of feedback, development of a draft standard (final draft), coordination and submission for approval;

Stage 4 - approval of the standard and state registration.

Note: it is allowed to combine the stages of standard development.

Stage 1. Development and approval of the technical terms of reference for the development of the standard (if necessary).

The technical terms of reference are drawn up by the developing organization in agreement with the customer organization in order to establish the stages of

work on the development of a regulatory document and, as a rule, include the following:

- the object of standardization and the scope of application;
- a list of sections of the standard and the main requirements established in the standard;
- stages of standard development;
- a list of documents to be submitted with the standard;
- a list of management bodies and/or enterprises with which the draft standard must be approved;
- other requirements of the customer.

Stage 2. Development of the draft standard (first draft) and distribution for feedback.

The draft standard is developed based on the proposals of interested organizations and/or on the initiative of the developing enterprises.

Simultaneously with the development of the draft standard, an explanatory note is drawn up to the draft standard and, if necessary, a draft plan of the main organizational and technical measures for the implementation of the standard (hereinafter referred to as the draft plan of the main measures) is developed. The draft standard, together with the explanatory note and the draft plan of the main measures, is reproduced and distributed to interested organizations according to the following list for comments:

- to the customer organization (main consumer) or one of its organizations designated as the base organization for the coordination of the draft standard;
- to state supervision bodies, the Ministry of Health, the Environmental Protection Committee, if the draft standard establishes requirements within their competence;
- to standardization base organizations for the associated types of products;
- to organizations and enterprises implementing and ensuring the implementation of the standard.

Enterprises and organizations, having reviewed the submitted draft standard, write their comments and send them to the developer of the standard no later than 15 days from the date of receipt of the draft standard.

Stage 3. Study of comments, development of the draft standard (final version), agreement and submission for approval.

The lead developing organization compiles information on the comments based on the received comments.

The developer - the lead organization and the partner implementing organizations, based on the feedback, develop the final version of the draft standard and clarify the explanatory note and the draft of the main action plan.

If there is a disagreement between the developing organization and other interested organizations on the draft standard, the developing organization holds a meeting to consider the disagreements with the participation of representatives of the main interested organizations, including representatives of customers (main consumers) authorized to make decisions on the draft standard under consideration.

If there are disagreements on individual articles of the clarified version of the draft standard, the minutes of the meeting indicate that the representatives of the organizations have a separate opinion on these articles. Based on the decisions taken at the meeting, the final version of the draft standard is developed, the explanatory note and the draft of the main action plan are clarified. Before submitting the final version of the draft standard for approval, the developing organization sends it to the customer organization (main consumer) for agreement. The standard draft shall be agreed upon within a maximum period of 15 days from the date of submission of the standard draft.

When developing a standard draft as part of work on the creation of a new improved product, the standard draft shall be agreed upon by the acceptance commission, the artistic and technical council (BTK), the tasting (quality assessment) commission, etc., with the participation of responsible representatives of interested organizations. The document confirming the agreement of the standard draft shall consist of an act of acceptance of a prototype (BTK protocol).

Amendments to the standard shall be agreed upon only with the customer (main consumer), if they do not affect the interests of previously agreed organizations. Before submitting the final version of the standard draft for approval, the base organization or the TC for standardization in the product or field of activity assigned to it shall first conduct a scientific, technical and legal examination of the standard.

Stage 4. Approval and state registration of the standard.

The developer-organization submits the draft standard for approval together with the following documents:

- cover letter;
- explanatory note to the latest revision of the draft standard;
- draft of the main action plan;
- draft standard in 4 copies, two of which must be the first;
- original documents confirming the agreement of the draft standard;

- a set of comments on the draft standard;
- a statement of disagreements;
- electronic version;

The standard is approved and put into effect by the decision of the body that approved the standard. The Agency for Technical Regulation shall carry out state registration of the standard. Additional requirements for products intended for export shall not be subject to state registration. The standard shall be submitted to the state register in 4 copies: the original, the second copy (duplicate) and two copies. The second copy of the standard shall be similar to the original of the standard and shall ensure the necessary quality of copying from it. The standard shall be submitted to the state register in two languages: state and Russian.

Any necessary amendments to the standard shall be clearly written by hand in black ink, paste, or ink, annotated on the back of the first sheet and certified by the signature of the head (deputy head) and the seal of the agency that submitted the standard for registration. The standard shall be submitted to the state register within a maximum of 5 days.

The original, second copy, and the first pages of both copies of the standard shall be stamped with the name of the registering authority, the date, and the state registration number of the registering authority. The first copy of the standard remains with the Agency for Technical Regulation. The original and the second copy of the standard are returned to the developer.

Explanatory note. Simultaneously with the development of the draft standard, an explanatory note is drawn up for the draft standard. The title of the explanatory note contains information about the level and full name of the standard, the serial number of the draft standard revision and/or the stage of development of the standard. Example:

The section "Basis for the development of the standard" indicates the source on which the standard is based.

The section "Goals and objectives of the development of the standard" contains the final results that will be achieved as a result of the application of the developed standard and the issues that will be resolved during the development of the standard.

The section "Details of the standardization object" contains information about the first development of the standard or information about the standards, technical conditions and other documents in force at the beginning of the development of the draft standard and a feasibility study of their acceptability

The section "Scientific and technical level of the standard" contains the results of the assessment of the scientific and technical level of the standard and its

compliance with the requirements of the world level, as well as information on what foreign similar standards it is adapted to and about them.

The section “Technical and economic efficiency from the introduction of the standard” contains the economic benefits of the standardization object, the main sources of savings and its material and monetary value or social effect.

The section “Term of introduction, implementation of the standard and verification of the standard” contains the following:

1) justification of the date of implementation of the standard taking into account the time for the implementation of the main action plan;

2) justification of the approval of the standard without limiting its validity period or justification of the intended period of limiting the validity of the standard, as well as justification of the terms of the first verification of the standard and subsequent verifications.

The section “Information on sending for comments” contains the following:

1) organizations to which the draft standard was sent for comments (enterprises);

2) the number of organizations that sent their opinions;

3) the results of consideration of opinions (summary of opinions)

The Law of the Republic of Uzbekistan “On Standardization” and the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 410 dated August 12, 1994 provide for state inspection and control over ensuring the uniformity of standards and measurements (hereinafter referred to as state control). The main task of state control is to ensure the implementation of the following by state and economic management bodies and business entities:

timely introduction of regulatory documents and metrological rules and strict adherence to them; ensuring the uniformity of measurements;

analyzing the scientific and technical level of regulatory documents and measuring instruments and ensuring the scientific and technical level of the development of regulatory documents and measuring instruments in order to increase production efficiency, accelerate scientific and technical progress, increase labor productivity, and improve the technical level and quality of products promote the effective use of technical achievements (Regulations on state control over ensuring the uniformity of standards and measurements).

In accordance with this Regulation, state control bodies:

check the timely implementation and compliance with regulatory documents and metrological regulations, including those establishing mandatory requirements for the safety of products for life, health and property of the population, environmental protection, saving of wealth, interchangeability, as well as the

uniformity of methods for their verification, uniformity of marking, compliance with other requirements included in the contract for the development, production and delivery of products, provided for by law.

check the work of standardization services and metrological services;

test individual types of products created by them in laboratories;

summarize the results of state control over ensuring the uniformity of standards and measurements, promote the more effective use of scientific and technical achievements in their development, and ensure the compliance with regulatory documents and metrological analyzes the reasons for the untimely implementation of the rules, their violation, develops and implements measures to increase the efficiency of state control bodies;

REFERENCES

[1] O'zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi PF 60 sonli "Harakatlar strategiyasidan – Taraqqiyot strategiyasi sari» tamoyiliga asosan ishlab chiqilgan quyidagi yettita ustuvor yo'nalishdan iborat 2022 – 2026 yillarga mo'ljallangan. Yangi O'zbekistonning taraqqiyot strategiyasi"

[2] O'zbekiston Respublikasi Prezidenti Sh.MIRZIYOYEVning 2019 yil 12 fevraldagi "To'qimachilik va tikuv trikotaj sanoatini isloh qilishni yanada chuqurlashtirish va uning eksport salohiyatini kengaytirish chora tadbirlari to'g'risida" qarori.

[3] 2019 yil 17 apreldagi PF-5708-sonli «Qishloq xo'jaligida davlat boshqaruvi tizimini takomillashtirish chora-tadbirlari to'g'risida»gi Farmonlari, 2017 yil 28 noyabrdagi PQ-3408-son «Paxtachilik tarmog'ini boshqarish tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida»gi Qarori

[4] "O'zto'qimachilik sanoat" uyushmasi matbuot xizmatining 2018 yil 26 dekabrda "O'zbekiston to'qimachilik sanoati: yil sarhisobi va yangi vazifalar tahlili" mavzusidagi hisoboti.

[5] O'zbekiston Respublikasi Prezidentining "To'qimachilik va tikuv-trikotaj sanoatini jadal rivojlantirish chora-tadbirlari to'g'risida"gi PF-5285-sonli farmoni. 14 dekabr 2017-yil.

[6] Ismatullaev P. R. va boshqalar. Metrologiya, standartlashtirish va sertifikatlashtirish. Darslik - Toshkent. : TDTU. 2001 yil.

[7] O'zbekiston Respublikasining "Mahsulotlar va xizmatlarni sertifikatlashtirish to'g'risida"gi Qonuni. 28. 12. 1993 yil.

[8] O'zbekiston Respublikasining "Texnik jihatdan tartibga solish to'g'risida"gi qonuni. 23. 04. 2009 yil.

[9] A. Abduvaliev, V. B. Latipov va boshqalar Standartlashtirish, metrologiya, sertifikatlashtirish, sifat". SMSITI Toshkent-2008 yil.

- [10] A. Абдувалиев “Метрология, стандартлаштириш ва сертификатлаштириш”, Тошкент-2018 йил.
- [11] P. R. Ismatullaev V. M. Axmedov va boshqalar “Sifat menjment tizimi va uni sertifikatlashtirish”. Toshkent 2014 yil.
- [12] O‘zbekiston Respublikasining “Standartlashtirish to‘g‘isida” gi Qonuni. 28. 12. 1993 yil.
- [13] O‘zbekiston Respublikasining "Muvofiqlikni baholash to‘g‘risida” gi qonuni. 04. 10. 2013 yil.